



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,350	08/26/2003	Yung-Cheng Lee	BHT-3111-355	3495

7590 01/23/2008
BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

SANDOVAL, KRISTIN D

ART UNIT	PAPER NUMBER
----------	--------------

2132

MAIL DATE	DELIVERY MODE
-----------	---------------

01/23/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,350

Applicant(s)

LEE ET AL.

Examiner

Kristin D. Sandoval

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-13 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-13 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-5, 7-13 and 15 are pending.

Response to Arguments

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3, 4 and 8-13 rejected under 35 U.S.C. 103(a) as being unpatentable over Waggamon et al. (Waggamon), U.S. Patent No. 6,049,289 in view of Ananda, U.S. Patent No. 6,671,813 and further in view of Yanovsky, U.S. Patent No. 5,703,948.

As per claims 1, 3, 4, 8, 9 and 13:

Waggamon substantially teaches an encoding device comprising:

a mode selector used to provide a mode select value (5:22-29);

a controller, by which an identity and said mode select value are received to generate a control signal in plaintext (4:43-5:8);

a 64 bit symmetric key stored in a non-volatile memory and an encryptor, which receives said control signal and applies said key to encrypt said control signal to a ciphertext (5:9-34); and

a RF modulator, which modulates and outputs said ciphertext (4:13-30).

Waggamon fails to teach a timer used to provide a transmitting time and a time between operations. However, Ananda discloses a clock timer and a transmitted time that is transmitted to a controller in an authorization message where the controller receives the transmitted time and calculates the time in between the transmitting and receiving (11:32-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to simply substitute a counter as disclosed by Waggamon with a clock as disclosed by Ananda, since the clock from Ananda would produce the same predictable result in Waggamon of a transmitting time and a time between operations.

In addition, Waggamon and Ananda fail to teach a mode select value selecting between a normal, emergency and synchronization mode. However, Yanovsky discloses a mode select value that's included in a header detailing which mode a transmission is in (11:48-60).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine a mode selection as taught by Yanovsky with the inventions of Waggamon and Ananda in order to detect any loss of synchronization and correct in a timely manner as taught by Yanovsky (3:47-54).

As per claim 10:

Waggamon further discloses a device wherein an initial value of the timer is a random number (4:53-54, 5:1-8).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to simply substitute a counter as disclosed by Waggamon with a clock as disclosed by

Art Unit: 2132

Ananda, since the clock from Ananda would produce the same predictable result in Waggamon of a transmitting time and a time between operations.

As per claim 11 and 12:

Waggamon further discloses a device wherein the timer is realized by a logic circuit on a single chip (4:13-31).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to simply substitute a counter as disclosed by Waggamon with a clock as disclosed by Ananda, since the clock from Ananda would produce the same predictable result in Waggamon of a transmitting time and a time between operations.

4. Claims 2, 5, 7 and 15 rejected under 35 U.S.C. 103(a) as being unpatentable over Waggamon in view of Ananda in view of Yanovsky as applied to claims 1 and 13 above, and further in view of Kawaguchi, U.S. PG-PUB 2002/0099967.

As per claims 2 and 5:

Waggamon, Ananda and Yanovsky fail to teach a 32 bit timer. However, Kawaguchi discloses a 32 bits timer resulting in a 32 bit time (paragraph 0093).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize a 32 bits timer as opposed to a 16 bits counter because this would allow larger numbers to be used.

As per claim 7:

Waggamon, Ananda and Yanovsky fail to teach a 2 byte identity value. However, Kawaguchi discloses a 2 byte Specifier and node ID (paragraphs 0070 and 0090).

Art Unit: 2132

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to utilize a 2 byte identity value as opposed to the 24 bit identity value in Waggamon in order to decrease the amount of bits dedicated to the identity value.

As per claim 15:

Waggamon substantially teaches activating an encoding device and a counter and encrypting the transmitting time and identity and the mode value (5:9-49). Waggamon fails to teach a timer. However, Ananda discloses a clock and a transmitting time (11:32-44). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to simply substitute a counter as disclosed by Waggamon with a clock as disclosed by Ananda, since the clock from Ananda would produce the same predictable result in Waggamon of a transmitting time and a time between operations.

Waggamon fails to teach checking whether the decoding device has been activated during a set time period and if it isn't then to stop timing and if it is then sending an encrypted signal with no mode value. However, Kawaguchi discloses checking a state on a decoder and suspending the timer if the state is idle and sending a transmission if the state is active (paragraph 0093). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to check if the decoder is activated in order to avoid wasting time sending signals to a decoder that is not activated.

In addition, Waggamon and Ananda fail to teach a mode select value selecting between a normal, emergency and synchronization mode. However, Yanovsky discloses a mode select value that's included in a header detailing which mode a transmission is in (11:48-60).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to combine a mode selection as taught by Yanovsky with the inventions of Waggamon and Ananda in order to detect any loss of synchronization and correct in a timely manner as taught by Yanovsky (3:47-54).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristin D. Sandoval whose telephone number is 571-272-7958. The examiner can normally be reached on Monday - Friday, 8:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

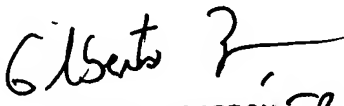
Art Unit: 2132

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KPS

KDS

Kristin D Sandoval
Examiner
Art Unit 2132


GILBERTO BARRON JR
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100